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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,174	12/02/2003	John B. Amundson	H0005443-9950 (1161.11391	4140

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EXAMINER	
GARLAND, STEVEN R	

ART UNIT	PAPER NUMBER
2125	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/726,174	AMUNDSON ET AL.	
	Examiner	Art Unit	
	Steven R. Garland	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/25/05,7/9/04,12/2/03*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/25/05,7/9/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The information disclosure statement(s) submitted 4/25/05 and 7/9/04 have considered to the extent indicated. Any documents that have been crossed out as not being considered were either missing pages, at least partly illegible, text or figures were cut off, and/or entirely missing from the submitted documents.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 12 and 39 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for output of an aural message, does not reasonably provide enablement for input of an aural command. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The specification appears to provide no support for the input of an aural (voice) command, but only provides support for output of an aural message. See page 3, lines 8-18 ; page 18, lines 13-23 ; page 25, lines 2-10 ; and claim 59.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 22, and 54-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 22, it is unclear as to how many parameters there are or if two parameters are being regarded as one parameter.

In claims 54-59, line 1, the term " programmable thermostat" lacks a proper antecedent basis.

6. Remarks: in the rejections that follow of claims 54-59 it is assumed that "thermostat" should be 'controller' as in parent claim 53.

7. Claims 33-52 are objected to because of the following informalities: in claim 33, line 4; "the" should be changed to --a-- since more than one parameter can be saved and also so that the language agrees with line 5. The other claims are objected to since they depend on objected to claim 33. Appropriate correction is required.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 53,54, and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Nielsen et al. 5,187,797.

Nielsen et al. 5,187,797 discloses a programmable controller having input means switches/keys, alphanumeric display (col. 9, lines 9-32); affirming responses (col. 10, lines 32-44; col. 18, lines 55-63); indicating changes are being saved (col. 36, lines 51-68; col. 37, 28-68). See the abstract; figures; col. 3, lines 30-35; col. 7, line 63 to col. 8, line 10; col. 9, line 13 to col. 10, line 43; col. 36, line 1 to col. 37, line 68.

10. Claims 1-3,5-11,13,14,16-26,29-38,40,42,43,45-47,50-54,57, and 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoog et al. 2004/0193324.

Hoog et al. 2004/0193324 discloses an audible/visual interface for a thermostat (abstract); that the thermostat can be used to control heating, cooling; ventilation (0054); that modified parameters are announced and/or visually displayed (0022,0075); activating a final triggering means to complete programming (0023); use of buttons (28,30); use of different periods “wake”, "day", "eve", and "sleep" periods (0038); use of an alphanumeric LCD (0039, fig.2); use of a report function which indicates that a parameter has been saved (0039-0041) ; informing the user of changes to the system and confirming completion of commands (0043,0064); use of a button 62 to save changes (0047); setting a clock (0053); setting different programs for heating/cooling (0059); use of a keypad 52; setting on/off functions (fig.3); See the abstract; figures; paragraphs 0005-0012; 0020-0023; 0035-0047;0053-0057;0059;0064-0071; 0075-0076; and the claims. Note in particular paragraph 0075. Note is also taken that in regards to claims 30-32 that simultaneous display is not required only that a combination of messages be displayed and which can occur a differing times.

11. Claims 12 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoog et al. 2004/0193324 as applied to claims 1-3,5-11,13,14,16-26,29-38,40,42,43,45-47,50-54,57, and 59 above, and further in view of Drennan 2003/0177012.

Hoog et al. 2004/0193324 discloses an audible/visual interface for a thermostat (abstract); that the thermostat can be used to control heating, cooling; ventilation (0054); that modified parameters are announced and/or visually displayed (0022,0075); activating a final triggering means to complete programming (0023); use of buttons (28,30); use of different periods "wake", "day", "eve", and "sleep" periods (0038); use of an alphanumeric LCD (0039, fig.2); use of a report function which indicates that a parameter has been saved (0039-0041) ; informing the user of changes to the system and confirming completion of commands (0043,0064); use of a button 62 to save changes (0047); setting a clock (0053); setting different programs for heating/cooling (0059); use of a keypad 52; setting on/off functions (fig.3); See the abstract; figures; paragraphs 0005-0012; 0020-0023; 0035-0047;0053-0057;0059;0064-0071; 0075-0076; and the claims. Note in particular paragraph 0075. Note is also taken that in regards to claims 30-32 that simultaneous display is not required only that a combination of messages be displayed and which can occur a differing times.

Hoog however does not teach aural (voice) commands.

Drennan 2003/0177012 teaches voice command of a thermostat (abstract); use of a keypad 308, display 310, audio input 312, audio output 314. See the abstract; figures; paragraphs 0006,0010,0028-0029,0032-033, and 0052.

It would have been obvious to one of ordinary skill in the art to modify Hoog in view of Drennan and allow voice commands to be input. This would allow easier input of data by visually or physically impaired users.

12. Claims 1-3,5,6,8-11,13,14,16-19,24,26-28,30-38,40,42,47-49,51-55,57, and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Cottrell 2002/0005435 (cited by applicant).

Cottrell 2002/0005435 teaches control of temperature or humidity (0004); use of buttons/keys (0056-0057, fig.1); display of alphanumeric data, icons, and graphs (0059,0061,0065,0067, figures 3-11); setting date, time, temperature and other parameters (0041-0042); confirming the set parameters after being set and visual verification using various visual displays (0027 and the figures); control of heating (20) and cooling (21) on a schedule having various start/stop times (fig.8). See the abstract; figures; paragraphs 0004,0026-0032; 0035-0046, 0055-0082,0095, and the claims.

13. Claims 7,15,41, 20-22, and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottrell 2002/0005435.

Cottrell 2002/0005435 teaches control of temperature or humidity (0004); use of buttons/keys (0056-0057, fig.1); display of alphanumeric data, icons, and graphs (0059,0061,0065,0067, figures 3-11); setting date, time, temperature and other parameters (0041-0042); confirming the set parameters after being set and visual verification using various visual displays (0027 and the figures); control of heating (20) and cooling (21) means on a schedule having various start/stop times (fig.8). See the

abstract; figures; paragraphs 0004,0026-0032; 0035-0046, 0055-0082,0095, and the claims.

Cottrell while teaching control of humidity and other parameters (0004) does not specifically state that humidity and ventilation are controlled, that a fan is controlled, or that equipment is turned on/off.

It would have been obvious to one of ordinary skill in the art to modify Cottrell to control humidity and other parameters such as ventilation to force conditioned air to the proper location and also turn the equipment on/off so that the heating, cooling, ventilation and humidity control functions could be accomplished.

14. Claims 4 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottrell 2002/0005435 as applied to claims 1-3,5,6,8-11,13,14,16-19,24,26-28,30-38,40,42,47-49,51-55,57, and 58 above, and further in view of Rosen 2003/0142121 (cited by applicant).

Cottrell 2002/0005435 teaches control of temperature or humidity (0004); use of buttons/keys (0056-0057, fig.1); display of alphanumeric data, icons, and graphs (0059,0061,0065,0067, figures 3-11); setting date, time, temperature and other parameters (0041-0042); confirming the set parameters after being set and visual verification using various visual displays (0027 and the figures); control of heating (20) and cooling (21) means on a schedule having various start/stop times (fig.8) . See the abstract; figures; paragraphs 0004,0026-0032; 0035-0046, 0055-0082,0095, and the claims.

Cottrell however does not teach the use of a touch screen.

Rosen 2003/0142121 (cited by applicant) teaches a programmable thermostat with a touch screen, and display of an alphanumeric message (abstract). See the abstract; figures; paragraphs 0004-0007.

It would have been obvious to one of ordinary skill in the art to modify Cottrell in view of Rosen and use a touch screen. This would allow various additional functions to be added or deleted easily and allow one type of thermostat model to be easily adapted to different types of systems.

15. Claims 1-3,5,6,8-11,13,14, 16-19,24,26,30-38,40,42,47,48,51-54 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Braeburn Model 5000 owners manual (cited by applicant).

The manual discloses a keypad (page 6), control of a fan, heating, and cooling (page 5), setting and use of various times, dates, and temperatures during a day (page 7, morn, day, eve, night), saving and display of parameters (pages 7-8, note steps 5-6 on page 8) and display of numeric and word data (see the figures) .

16. Claims 1-6,8-11,13,14,16-19,24-28,33-38,40,42,47-49 and 53-58 are rejected under 35 U.S.C. 102(a) as being anticipated by Rite Temp 8082 cited by applicant as (http://www.ritetemp.info/rtMenu 13.html, Rite temp 8082, (printed on 6/20/03).

The thermostat has a touch screen and sounds chirps (page 1); controls fan, heating, and cooling (page 1); allows selection and displays time, temperature, day, provides icons (chirp note, home, etc.), uses time slots (morn, day, etc.) on pages 2-3, allows review of stored programming (page 4) and also provides an

indication that programming has been saved by returning to the home screen indicating changes have been saved (60 sec rule).

17. Remarks: it is noted that claim 1 for example, which calls for an indication that a parameter has been saved or will be saved can be met by a large range prior art thermostats such as a mechanical thermostat that simply by modifying a temperature setting by moving a lever to a new position a new set temperature is mechanically stored and indicated. As a second example by pushing a button on a thermostat to set a new temperature and the display indicates the new set temperature.

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hanajima 4,503,471 is of interest in checking parameter settings (abstract). Mock et al. 5,414,618 is of interest in detecting an input change (col. 2, lines 1-12). Hull 2004/0262410 is of interest in teaching the use of a touch screen, graphical display in a HVAC system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R. Garland whose telephone number is 571-272-3741. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SRG

Steven R Garland
Examiner
Art Unit 2125

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